ABSTRACT

A system and method protects against rollover in a vehicle by employing an array of linear acceleration sensors. A control module includes, among other things, a model of the vehicle dynamics and a model of the array of sensors. A state vector is estimated based on the detected accelerations, the model of the vehicle dynamics and the model of the sensors. A control signal is generated based on the state vector, and the roll moment of the vehicle is reduced based on the control signal.